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09/628,023	07/28/2000	Shigeo Yamagata	35.C14654	2202

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EXAMINER

PHAM, THIERRY L

ART UNIT PAPER NUMBER

2624

DATE MAILED: 03/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/628,023

Applicant(s)

YAMAGATA ET AL.

Examiner

Thierry L Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-63 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-63 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5-6.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Oath/Declaration***

1. Signed Declaration had been received and acknowledge.

***Specification***

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Image Processing System for Preventing Forgery.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites limitations that are unclear to the examiner; i.e., "judging means for judging whether judgment of whether a color image composed of color image data is a specific image has been already performed", what subject is "already been performed"? The claim language is confusing and unclear to the examiner.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-63 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Yamaguchi et al (U.S. 5390003).

Regarding claim 1, Yamaguchi discloses an image processing apparatus (Fig. 5), comprising:

(1) input means (image reading section, fig. 5, col. 2, lines 11-60) for inputting color image data;

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- (2) judging means (deciding means, col. 2, lines 10-61) for judging whether judgment of whether a color image composed of the color image data is a specific image (reference pattern, fig. 10, col. 3, lines 23-57) has been already performed; and
- (3) image judging means (bill-recognition processing section, fig. 5, col. 11, lines 53-67 to col. 12, lines 1-50) for judging whether the color image includes the specific image if the judgment has not been performed yet.

Regarding claim 2, Yamaguchi further discloses the image processing apparatus according to claim 1, further comprising: image forming means for forming a color image corresponding to the color image data, wherein said image forming means does not form (copy is prohibited if money is detected, abstract and col. 2, lines 11-62) the color image or forms an image that becomes worthless by copying if a result of the judgment having been already performed is that the color image composed of the color image data is the specific image or the image judgment by the image judging means shows that the color image composed of the color image data is the specific image.

Regarding claim 3, Yamaguchi further discloses the image processing apparatus according to claim 1, further comprising judgment result input means for inputting a result of judgment of whether the color image composed of the color image data is the specific image (deciding means, col. 2, lines 11-62 and col. 11, lines 31-67 to col. 12, lines 1-50), wherein judgment by the judging means is performed ahead of judgment by said image judging means (preliminary decision with respect to reference patterns, col. 11, lines 31-67 to col. 12, lines 1-50).

Regarding claim 4, Yamaguchi further discloses the image processing apparatus according to claim 1, wherein said specific image is a security such as a bank note and a traveler's check (paper money and security check, col. 2, lines 11-54).

Regarding claim 5, Yamaguchi further discloses the image processing apparatus according to claim 1, wherein said image judging means judges the color image data by pattern matching

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(pattern matching, col. 3, lines 23-56) or color matching, or judges digital water mark information included in the color image data.

Regarding claim 6, Yamaguchi further discloses the image processing apparatus according to claim 3, wherein said judgment result input means inputs a result of the judgment ahead (preliminary decision, col. 9, lines 65-67 to col. 10, lines 1-38) of the color image data.

Regarding claim 7, Yamaguchi further discloses the image processing apparatus according to claim 1, wherein said color image data is inputted from a scanner (scanner 32, fig. 2, col. 8, lines 41-51), or a digital camera.

Regarding claim 8, Yamaguchi further discloses the image processing apparatus according to claim 1, wherein the color image data is inputted via a network (plurality of apparatuses connected via network including color image data inputs, fig. 1, col. 3, lines 23-57 and col. 5, lines 55-67 to col. 6, lines 1-23).

Regarding claim 9, Yamaguchi further discloses an image processing apparatus, comprising:

- (1) receiving means (image reading section, fig. 5, col. 2, lines 11-60) for receiving color image data from an image generating apparatus having a forgery judging function (bill-recognition procession section, fig. 5) and an image generating apparatus not having (normal printing without forgery function, col. 10, lines 1-12) a forgery judging function;
- (2) judging means (deciding means, col. 2, lines 10-61) for judging whether a color image composed of the color image data received by said receiving means is a specific image (paper money pattern, fig. 10); and
- (3) output means (printer, fig. 1) for outputting the color image data so as to make an image forming unit form a color image by using the color image data received from said receiving means, wherein the image processing apparatus controls formation of the color image according to a result of judgment in the image generating apparatus having the forgery judging function (copying/printing is prohibited if money is detected, abstract and col. 2, lines 11-62) if the color image data is generated by the image generating apparatus having the forgery judging function,

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and controls formation of the color image according to a result of judgment by said judging means if the color image data is generated by the image generating apparatus not having the forgery judging function (normal printing is performed if a document contains no security data, col. 11, lines 53-67 to col. 12, lines 1-50).

Regarding claim 10, please see rejection rationale/basis as described in claim 7 above.

Regarding claims 11-13, please see rejection rationale/basis as described in claims 4-6 above.

Regarding claim 14, please see rejection rationale/basis as described in claim 8 above.

Regarding claim 15, Yamaguchi further discloses an image processing method in an image processing system where a plurality of image processing apparatuses are connected via a network (plurality of forming apparatuses are connected via a network, fig. 1, col. 3, lines 23-57 and col. 5, lines 55-67 to col. 6, lines 1-23), wherein, if the plurality of image processing apparatuses has a plurality of specific image judging units (each forming apparatus having a bill recognition unit, fig. 5), after any one of the plurality of specific image judging units judges color image data, the plurality of specific image judging units does not judge (normal printing/copying is performed if document is not protected, col. 11, lines 53-67 to col. 12, lines 1-43) the color image data.

Regarding claim 16, please see rejection rationale/basis as described in claim 1 above.

Regarding claim 17, please see rejection rationale/basis as described in claim 9 above.

Regarding claim 18, please see rejection rationale/basis as described in claim 9 above.

Regarding claim 19, please see rejection rationale/basis as described in claim 4 above.

Regarding claim 20, please see rejection rationale/basis as described in claim 5 above.

Regarding claim 21, please see rejection rationale/basis as described in claim 4 above.

Regarding claims 22-23, Yamaguchi further discloses the image processing system according to claim 18, wherein said first judging means and said second judging means perform judgment of the same specific image, and the first judging means performs judgment by using an image

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signal with resolution lower (image reading speed is lower than usual if the image is detected as having a security mark, col. 10, lines 29-39) than that of the second judging means.

Regarding claim 24, Yamaguchi further discloses the image processing apparatus system according to claim 18, wherein the first apparatus is a scanner (scanner 31, fig. 2, col. 8, lines 41-51), and the second apparatus is a printer (printing section, figs. 2 & 5).

Regarding claims 25-31, please see rejection rationale/basis as described in claims 18-24 as described above.

Regarding claim 32, Yamaguchi further discloses wherein the data processing (instruction from CPU 41, col. 10, lines 5-57) to a specific image is down-loaded from a computer.

Regarding claims 33, 47, Yamaguchi discloses an image processing method, wherein, if an image signal inputted is not a specific image as a result of judgment of whether the image signal inputted corresponds to the specific image, the image signal is stored as an image file (information storing means, col. 3, lines 23-56).

Regarding claim 34, please see rejection rationale/basis as described in claim 5 as described above.

Regarding claim 35, Yamaguchi further discloses the image processing method, wherein information of a specific image having been already judge is added to the image file (specific image pattern is stored in a memory file, col. 3, lines 23-56 and col. 7, lines 52-62).

Regarding claim 36, please see rejection rationale/basis as described in claim 4 above.

Regarding claim 37, please see rejection rationale/basis as described in claim 1 above.

Regarding claim 38, Yamaguchi further discloses the image processing method wherein the information of a specific image having been already judged is added to the image file

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(information storing means for storing reference pattern, col. 3, lines 22-56 and col. 11, lines 53-67 to col. 12, lines 1-43), and judgment at the time of printing is performed on the basis of the additional information (reference pattern, col. 11, lines 53-67).

Regarding claim 39, Yamaguchi further discloses the image processing method, wherein judgment of a specific image having been already judged is omitted (if no security data is detected when judging, then normal printing is performed, col. 10, lines 1-39, i.e., it is not necessary to perform an additional security detection when no protected data is detected) on the basis of the additional information.

Regarding claim 40, Yamaguchi discloses image processing method, comprising the steps of: (1) obtaining information (information storing means, col. 3, lines 23-56) that is added to an image file and denotes whether it has been already judged whether the image file includes a specific image (encoded security, col. 3, lines 23-56); (2) and judging the image file on specific images, which have not been judged yet, if the judgment has been already performed, and judging the image file on specific images, which can be used for judgment, if no judgment has been performed (to determine if the inputted image is copy-right protected, col. 11, lines 53-67 to col. 12, lines 1-42).

Regarding claims 41-42, please rejection rationale/basis as described in claim 5 above.

Regarding claim 43, please see rejection rationale/basis as described in claim 9 above.

Regarding claim 44, Yamaguchi further discloses the image processing method, wherein the information for supplying the specific image judging function is address information (col. 16, lines 41-65).

Regarding claims 45-46, 48, Yamaguchi further discloses the image processing method, wherein the image processing method is in a scanner/printer driver (programs for deciding whether or not the image of a document copied/printed out is a copy-prohibited image, col. 6, lines 55-63). It is



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known in the art, all printers/scanners have some type of memory (RAM 44, col. 7, lines 52-57) for storing programs (drivers) for processing image data (i.e., converting image data to PDL data before copy and/print).

Regarding claim 49, Yamaguchi discloses an image processing apparatus comprising: (1) judging means (deciding means, col. 2, lines 10-61) for judging whether image data inputted includes a specific image (security pattern, fig. 10, col. 3, lines 23-57); (2) additional information storing means (RAM 44, col. 7, lines 52-57) for storing a result (detecting results, col. 3, lines 23-42) of said judging means as additional information; (3) output means (printers, fig. 1) for outputting the image data as an image; and (4) control means (CPU 41, col. 10, lines 5-56) for controlling an image output by said output means on the basis of the additional information.

Regarding claim 50, Yamaguchi further discloses the image processing apparatus according to claim 49, wherein said additional information further includes at least any one of presence of a result of judgment of whether image data includes the specific image (determine whether the input image contains security data, col. 10, lines 5-57), and a control method of image data judged as the specific image.

Regarding claim 51, Yamaguchi further discloses the image processing apparatus according to claim 49, wherein said control means controls (CPU 41, col. 10, lines 5-56) the output means lest said output means should output image data (prints image data that does not contain security data, col. 10, lines 5-56) that has not been judged by said judging means.

Regarding claim 52, Yamaguchi further discloses the image processing apparatus according to claim 51, wherein, assuming that the image data has not been judged by said judging means if there is not additional information corresponding to the image data (prints image data that does not contain security data, col. 10, lines 5-56), said control means controls the output means lest said output means should output the image data.

Regarding claim 53, Yamaguchi further discloses the image processing apparatus according to claim 51, wherein, if the additional information includes information denoting that image data corresponding to the additional information has not been judged by said judging means, said control means controls the output means lest said output means should output the image data (col. 10, lines 5-56).

Regarding claim 54, Yamaguchi further discloses the image processing apparatus according to claim 49, wherein, if the additional information includes information denoting that image data corresponding to the additional information includes a specific image (col. 10, lines 5-56), said control means controls said output means lest said output means should output the image data.

Regarding claim 55, Yamaguchi further discloses the image processing apparatus according to claim 54, wherein, if the additional information includes information denoting that image data corresponding to the additional information includes a specific image, said control means inform a user of that fact (col. 7, lines 32-49).

Regarding claim 56, Yamaguchi further discloses the image processing apparatus according to claim 49, further comprising modifying means ("invalid" character is printed, col. 19, lines 14-36) for modifying an image judged as an image including a specific image by the judging means, wherein the additional information includes information denoting that image data is modified by said modifying means.

Regarding claim 57, Yamaguchi further discloses the image processing apparatus according to claim 56, wherein, if the additional information includes information denoting that image data corresponding to the additional information is modified, said control means controls said output means lest said output means should output the image data (col. 10, lines 5-56).

Regarding claim 58, Yamaguchi further discloses the image processing apparatus according to claim 57, wherein, if the additional information includes information denoting that image data

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corresponding to the additional information is modified, said control means inform a user of that fact ("invalid" character is printed, col. 19, lines 14-36 and col. 7, lines 32-49).

Regarding claim 59, Yamaguchi further discloses the image processing apparatus according to claim 49, further comprising storing means (RAM, col. 7, lines 52-57) for storing image data inputted, wherein, when plural sets of the image data inputted are printed out by said output means (plurality of printers, fig. 1), the control means performs control of repeatedly reading image data, stored in said storing means, according to the additional information.

Regarding claim 60, Yamaguchi further discloses the image processing apparatus according to claim 59, wherein, if it is judged by said judging means that the image data inputted includes a specific image, said control means performs any one of inhibiting storage into said storing means, storing the image data in said storing means after correcting (col. 11, lines 18-62) the image data, and deleting the image data stored in said storing means.

Regarding claim 61, Yamaguchi further discloses the image processing apparatus according to claim 49, wherein said judging means judges whether the image data includes a specific image by judging whether specific digital water mark (paper money, abstract) information is inserted in the image data.

Regarding claim 62, Yamaguchi further discloses the image processing apparatus according to claim 49, wherein said judging means judges whether the image data includes a specific image on the basis of a similarity degree between characteristics (pattern-matching, col. 11, lines 46-67), obtained from the image data, and characteristics of the specific image set beforehand.

Regarding claim 63, please see rejection rationale/basis as described in claim 49 above.

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***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(1) U.S. 6427020 to Rhoads, discloses an apparatus/method for preventing forgery of security data (money, banknotes).

(2) U.S. 6515755 to Hasegawa, discloses an apparatus/method for preventing forgery of security data (money, banknotes).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thierry L Pham whose telephone number is (703) 305-1897. The examiner can normally be reached on M-F (9:30 AM - 6:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David K Moore can be reached on (703)308-7452. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thierry L. Pham

TP  
February 23, 2004

  
GABRIEL GARCIA  
PRIMARY EXAMINER